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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/872,081	06/01/2001	Mitchell T. Berg	700135.435	3834
500 7590 06/08/2007 SEED INTELLECTUAL PROPERTY LAW GROUP PLLC 701 FIFTH AVE SUITE 5400 SEATTLE, WA 98104			EXAMINER DUONG, OANH L	
			ART UNIT 2155	PAPER NUMBER
			MAIL DATE 06/08/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 09/872,081	Applicant(s) BERG, MITCHELL T.	
	Examiner Oanh Duong	Art Unit 2155	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 March 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 and 30-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 and 30-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>03/20/2007</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. Claims 1-28, and 30-48 are presented for examination.

Claim 29 has been canceled.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-28, 30, 32-41, and 45-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masters (US 6,374,300 B2) in view of Brendel, US 6,772,333 B1.

Regarding claim 1, Masters teaches an information processing system (Fig. 6A), comprising:

A first computing device (i.e., server array controller 118) configured to:

receive first information that has been formed according to application software instructions (i.e., the selected node server generates an HTTP response and provides the generated HTTP response to the server array controller 118) [see col. 12 lines 41-44];

independent of the application software instructions, form second information for causing a second computing device to perform an operation (i.e., server array controller 118 rewrites the data packet(s) containing the HTTP response so that (HTTP) Cookie

(or HTTP session identifier) information identifying the node server selected to provide access to the requested resources can be inserted into the data packet) [see col. 12 lines 44-48];

in response to receiving the first information, forming a packet that includes at least the first and second information (i.e., provides the generated HTTP response to the server array controller 118...where the server array controller 118 rewrites the data packet(s) containing the HTTP response so that Cookie information identifying the node server selected to provide access to the requested resources can be inserted into the data packet) [col. 12 lines 44-48];

outputting the packet to the second computer (i.e., the server array controller 118 provides to the client 10 the rewrite data packet that includes the HTTP response and the inserted Cookie information) [see col. 12 lines];

Masters does not explicitly teach executing the protocol stack instructions to form a data portion of a packet.

Brendel teaches system and method wherein an automatic operation assigns both un-encrypted clear-text requests and encrypted requests from a client to the same server at the server farm (abstract). Brendel teaches executing the protocol stack instructions to form a data portion of a packet (*col. 8 lines 32-52: Brendel discloses a special cookie is embedded in an encrypted data payload of an HTTP message*).

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify the teachings of Masters to execute the protocol stack instructions to form a data portion of packet as taught by Brendel. One would be

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motivated to do so to enable traffic to be distributed as evenly as possible without assigning connections from one computer to different servers (Brendel, col. 13 lines 13-16).

Regarding claim 2, Masters-Brendel teaches the system of claim 1 wherein the first computer device is configured to:

in response to receiving the first information, execute the protocol stack instructions for forming the packet in according with a network protocol (Brendel, Fig. 4 col. 3 line 58-col. 4 line 6).

Regarding claim 3, Masters teaches the network protocol is TCP/IP (i.e., TCP/IP handshake is performed between the client 10 and the server array controller 118) [page 7 paragraph 84].

Regarding claim 4, Masters-Brendel teaches the system of claim 2 wherein the network protocol is UDP/IP (Brendel, col. 14 lines 2-3).

Regarding claim 5, Masters teaches outputting the packet to the second computing device (i.e., client 10) through a network in accordance with the network protocol (i.e., provides to the client 10 the rewritten data packet that includes the HTTP response and the inserted Cookie information) [Fig. 1A, page 7 paragraph 85].

Regarding claim 6, Masters teaches the network is a global computer network (i.e., a wide area network such as Internet) [page 8 paragraph 96].

Regarding claim 7, Masters teaches the network is an IP network (i.e., a wide area network such as Internet) [page 8 paragraph 96].

Regarding claim 8, Masters teaches in response to receiving the first information, executing the instructions for forming the packet and the data portion including the first and second information (i.e., controller inserts cookie information identifying server in header of HTTP response and rewrite data packet for HTTP response) [Fig. 6A, block 238].

Masters does not explicitly teach executing the protocol stack instructions to form a packet.

Brendel teaches system and method wherein an automatic operation assigns both un-encrypted clear-text requests and encrypted requests from a client to the same server at the server farm (abstract). Brendel teaches executing the protocol stack instructions to form a data portion of a packet (*col. 8 lines 32-52: Brendel discloses a special cookie is embedded in an encrypted data payload of an HTTP message*).

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify the teachings of Masters to execute the protocol stack instructions to form a data portion of packet as taught by Brendel. One would be motivated to do so to enable traffic to be distributed as evenly as possible without

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assigning connections from one computer to different servers (Brendel, col. 13 lines 13-16).

Regarding claim 9, Masters teaches the second device is a client computing device (i.e., client 10) [Fig. 1, col. 6 lines 34-46].

Regarding claim 10, Masters teaches the operation including maintaining a session (i.e., the HTTP request along with the Cookie is transmitted from the client 10 to the server array controller) [see col. 12 lines 61-63].

Regarding claim 11, Masters teaches maintaining a session by addressing a subsequent packet to the first computing device (i.e., the HTTP request along with the Cookie is transmitted from the client 10 to the server array controller) [see col. 12 lines 61-63].

Regarding claim 12, Masters teaches the operation includes modifying state information [col. 12 line 64-col. 13 line 24].

Regarding claim 13, Masters teaches a method performed by a first computing device (i.e., server array controller 118, Fig. 1A) of an information processing system (Fig. 6A), the method comprising:

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receiving first information that has been formed according to application software instructions (i.e., the selected node server generates an HTTP response and provides the generated HTTP response to the server array controller 118) [see col. 12 lines 41-44];

independent of the application software instructions, forming a second information for causing a second computing device to perform an operation (i.e., server array controller 118 rewrites the data packet(s) containing the HTTP response so that (HTTP) Cookie (or HTTP session identifier) information identifying the node server selected to provide access to the requested resources can be inserted into the data packet) [see col. 12 lines 44-48];

in response to receiving the first information, forming a packet include at least the first and second information (i.e., provides the generated HTTP response to the server array controller 118...where the server array controller 118 rewrites the data packet(s) containing the HTTP response so that Cookie information identifying the node server selected to provide access to the requested resources can be inserted into the data packet) [col. 12 lines 44-48];

outputting the packet to the second computer (i.e., the server array controller 118 provides to the client 10 the rewrite data packet that includes the HTTP response and the inserted Cookie information) [see col. 12 lines];

Masters does not explicitly teach executing the protocol stack instructions to form a data portion of a packet.



Brendel teaches system and method wherein an automatic operation assigns both un-encrypted clear-text requests and encrypted requests from a client to the same server at the server farm (abstract). Brendel teaches executing the protocol stack instructions to form a data portion of a packet (*col. 8 lines 32-52: Brendel discloses a special cookie is embedded in an encrypted data payload of an HTTP message*).

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify the teachings of Masters to execute the protocol stack instructions to form a data portion of packet as taught by Brendel. One would be motivated to do so to enable traffic to be distributed as evenly as possible without assigning connections from one computer to different servers (Brendel, col. 13 lines 13-16).

Regarding claim 14, Masters-Brendel teaches the system of claim 1 wherein the first computer device is configured to:

in response to receiving the first information, execute the protocol stack instructions for forming the packet in according with a network protocol (Brendel, Fig. 4 col. 3 line 58-col. 4 line 6).

Regarding claim 15, Masters teaches the network protocol is TCP/IP (i.e., TCP/IP handshake is performed between the client 10 and the server array controller 118) [page 7 paragraph 84].

Regarding claim 16, Masters-Brendel teaches the method of claim 14 wherein the network protocol is UDP/IP (Brendel, col. 14 lines 2-3).

Regarding claim 17, Masters teaches outputting the packet to the second computing device (i.e., client 10) through a network in accordance with the network protocol (i.e., provides to the client 10 the rewritten data packet that includes the HTTP response and the inserted Cookie information) [Fig. 1A, page 7 paragraph 85].

Regarding claim 18, Masters teaches the network is a global computer network (i.e., a wide area network such as Internet) [page 8 paragraph 96].

Regarding claim 19, Masters-Muller teaches the network is an IP network (i.e., a wide area network such as Internet) [Masters, page 8 paragraph 96].

Regarding claim 20, Masters teaches in response to receiving the first information, executing the instructions for forming the packet and the data portion including the first and second information (i.e., controller inserts cookie information identifying server in header of HTTP response and rewrite data packet for HTTP response) [Fig. 6A, block 238].

Masters does not explicitly teach executing the protocol stack instructions to form a packet.

Brendel teaches system and method wherein an automatic operation assigns both un-encrypted clear-text requests and encrypted requests from a client to the same server at the server farm (abstract). Brendel teaches executing the protocol stack instructions to form a data portion of a packet (*col. 8 lines 32-52: Brendel discloses a special cookie is embedded in an encrypted data payload of an HTTP message*).

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify the teachings of Masters to execute the protocol stack instructions to form a data portion of packet as taught by Brendel. One would be motivated to do so to enable traffic to be distributed as evenly as possible without assigning connections from one computer to different servers (Brendel, col. 13 lines 13-16).

Regarding claim 21, Masters teaches the second device is a client computing device (i.e., client 10) [Fig. 1, col. 6 lines 34-46].

Regarding claim 22, Masters teaches the operation including maintaining a session (i.e., the HTTP request along with the Cookie is transmitted from the client 10 to the server array controller) [see col. 12 lines 61-63].

Regarding claim 23, Masters teaches maintaining a session by addressing a subsequent packet to the first computing device (i.e., the HTTP request along with the

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Cookie is transmitted from the client 10 to the server array controller) [see col. 12 lines 61-63).

Regarding claim 24, Masters teaches the operation includes modifying state information [see col. 12 line 64-col. 13 line24].

Regarding claims 25, 28-30 and 35-36 do not recite or define any new limitation above claim 13, discussed above, same rationale of rejection is applicable.

Claim 26 does not recite or define any new limitation above claim 2, therefore same rationale rejection is applicable.

Claim 27 does not recite or define any new limitation above claim 9, therefore same rationale of rejection is applicable.

Claim 32 does not recite or define any new limitation above claim 10 and therefore, the same rationale of rejection is applicable.

Regarding claim 33, Masters teaches the computer-readable medium of claim 25 wherein the second information causes the second computing device to migrate an existing session (abstract, col. 15 lines 50-57).

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Claims 38-39 do not recite or define any new limitation above claim 12 and therefore, the same rationale of rejection is applicable.

Regarding claim 34, Masters teaches the computer-readable medium of claim 25 wherein the second information comprises a cookie (i.e., Cookie, col. 5 lines 33-46).

Regarding claim 37, Masters-Muller teaches the information processing system of claim 35 wherein the means for executing protocol stack instructions comprises a protocol stack processor (Muller, col. 9 lines 52-55).

Regarding claim 40, Masters teaches the information processing system of claim 35 wherein the second information comprises a cookie (i.e., Cookie, col. 5 lines 33-46).

Claim 41 does not recite or define any new limitation above claim 33; therefore, the same rationale is applicable.

Regarding claims 45 and 47, those claims recites limitation that substantially the same as claim 33, same rationale of rejection is applicable.

Regarding claim 46, Masters teaches the information processing system of claim 1 wherein the second information comprises a cookie (col. 11 lines 1-5).

Regarding claim 47, Masters teaches the method of claim 13 wherein the second information comprises a cookie (col. 11 lines 1-5).

4. Claims 31, and 42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masters (US 6,374,300 B2), in view of Brendel, and further in view of Muller et al. (Muller) (US 6,453,360 B1).

Regarding claim 31, Masters teaches the computer-readable storage medium of claim 25.

The combination of Masters and Brendel does not explicitly teach the first computing device comprises an intelligent network interface card (Muller, NIC, col. 8 lines 22-29).

Muller teaches teach the first computing device comprises an intelligent network interface card (NIC, col. 8 lines 22-29).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of Masters and Brendel to include an intelligent network interface card as taught by Muller. One would be motivated to do so to enable protocol headers to be processed by a processor located on the intelligent network interface card, and the higher layer processing, which must be performed by the selected node server, to be simplified. Thus, the performance of information processing system would be improved.

Regarding claims 42-44, this claim does not recite or define any new limitation above claim 31; therefore, the same rationale is applicable.

### ***Response to Arguments***

5. Applicant's arguments filed 03/20/2007 have been fully considered but they are not persuasive.

In the remarks, applicant argued in substances that

(A) Prior art (i.e., Brendel) does not teach, suggest, or motivate executing protocol stack instructions to form a data portion of a packet.

As to point (A), Brendel teaches a cookie is embedded in an encrypted data payload of an HTTP message (*col. 8 lines 32-52*). One of ordinary skill in the art will readily recognize that cookie exists at level 7 in the protocol stack. Therefore, cookie embedded in the payload is formed by the protocol stack instructions.

As a result, the cited prior art does disclose method and information processing system as broadly claimed by the applicants. Applicants clearly have still failed to identify specific claim limitations that would define a clearly patentable distinction over prior arts.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

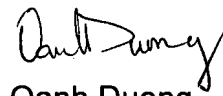
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Oanh Duong whose telephone number is (571) 272-3983. The examiner can normally be reached on Monday- Friday, 9:30PM - 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Oanh Duong  
June 6, 2007